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CLAIMS APPENDIX

1. (Amended) A computer-implemented method for managing information relating to processing of polymer probe arrays, said method comprising the steps of:

creating an electronically-stored experiment table, said experiment table storing a record for an experiment, said experiment record comprising:

a first identifier identifying a target sample applied to a polymer probe array chip in said experiment;

a second identifier identifying said polymer probe array chip to which said target sample was applied in said experiment;

creating an electronically-stored chip table, said chip table storing a record for said polymer probe array chip, said chip record comprising:

said second identifier identifying said polymer probe array chip; and
a third identifier specifying a layout of polymer probes on said polymer
probe array chip; and

associating an output image file with said electronically-stored chip table, wherein said polymer probe array chip is applied with a target sample derived from a biological source to produce said output image file.

- 2. (Amended) The method of claim 1 further comprising the step of: performing an experiment wherein said target sample is applied to said polymer probe array chip.
- 3. (Amended) The method of claim 1 further comprising the steps of: creating an electronically-stored target table, said target table storing a record for said target sample, said target sample record comprising: said first identifier identifying said target sample; and



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a fourth identifier specifying parameters of preparation of said target sample.

- 4. (Amended) The method of claim 1 wherein said polymer probe array chip comprises an oligonucleotide array chip.
 - 5. (canceled)
- 6. (Amended) A computer-implemented method for managing information relating to processing of polymer probe arrays, said method comprising the steps of:

storing in an electronically-stored experiment table for each of a plurality of experiments, a first identifier identifying a target sample applied to an polymer probe array chip in a particular experiment;

storing in said electronically-stored experiment table for each of said plurality of experiments a second identifier identifying said polymer probe array chip to which said target sample was applied in said particular experiment;

storing in an electronically-stored chip table for each of a plurality of polymer probe array chips, said second identifier identifying a particular polymer probe array chip; and

storing in said electronically-stored chip table for each of said plurality of polymer probe arrays chips a third identifier specifying a layout of polymer probes on said polymer probe array chip; and

associating an output image file with said electronically-stored experiment table, wherein said polymer probe array chip is applied with a target sample derived from a biological source to produce said output image file.

7. The method of claim 6 further comprising the steps of:



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storing in an electronically-stored target table, for each of a plurality of target samples, said first identifier identifying a particular target sample; and storing in said electronically stored target table, for each of said plurality of target samples, a fourth identifier specifying parameters of preparation of said particular target sample.

- 8. The method of claim 6 wherein said polymer probe array chip comprises an oligonucleotide array chip.
- 9. (Amended) A computer-readable storage medium having stored thereon:

code for creating an electronically-stored experiment table, said experiment table listing for each of a plurality of experiments:

a first identifier identifying a target sample applied to an oligonucleotide array chip in a particular experiment;

a second identifier identifying said oligonucleotide array chip to which said target sample was applied in said particular experiment;

code for creating an electronically-stored chip table, said chip table listing for each of a plurality of oligonucleotide array chips:

said second identifier identifying said particular oligonucleotide array chip; and

a third identifier specifying a layout of oligonucleotide probes on said particular oligonucleotide array chip; and

code for associating an output image file with said electronically-stored chip table, wherein said polymer probe array chip is applied with a target sample derived from a biological source to produce said output image file.

10. The computer-readable storage medium of claim 9 having further stored thereon:



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code for creating an electronically-stored target table, said target table listing records comprising:

said first identifier identifying said target sample for one or more of said plurality of experiments; and

a fourth identifier specifying parameters of preparation of said target sample for one or more of said plurality of experiments.

11. (Amended) A computer-readable storage medium having stored thereon:

an electronically-stored experiment table, said experiment table listing for each of a plurality of experiments:

a first identifier identifying a target sample applied to an oligonucleotide array chip in a particular experiment;

a second identifier identifying said oligonucleotide array chip to which said target sample was applied in said particular experiment;

an electronically-stored chip table, said chip table listing for each of a plurality of oligonucleotide array chips:

said second identifier identifying a particular oligonucleotide array chip; and

a third identifier specifying a layout of oligonucleotide probes on said particular oligonucleotide array chip; and

associating an output image file with said electronically-stored experiment table, wherein said polymer probe array chip is applied with a target sample derived from a biological source to produce said output image file.

- 12. (canceled)
- 13. (canceled)